

[10191/1818]

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Inventor(s) : Markus RADIMIRSCH
Serial No. : To Be Assigned
Filed : Herewith
For : DATA TRANSMISSION DEVICE
Examiner : To Be Assigned
Art Unit : To Be Assigned

Assistant Commissioner
for Patents
Washington, D.C. 20231

PRELIMINARY AMENDMENT

SIR:

Kindly amend the above-identified application before
examination, as set forth below.

IN THE TITLE:

Please replace the title with the following:
--DATA TRANSMISSION DEVICE--.

IN THE SPECIFICATION:

Please amend the specification, including abstract,
pursuant to the attached substitute specification. Also
attached is a marked up copy of the specification, indicating
deleted and added sections. No new matter has been added.

IN THE CLAIMS:

Please cancel claims 1-11 in the underlying PCT
application, without prejudice.

09807710-081004

[10191/1818]

DATA TRANSMISSION DEVICE

[Background Information

]FIELD OF THE INVENTION

The present invention relates to a data transmission device on a common medium having a central station and a plurality of subscribers, which is controllable by transmitting data packets from the central station to the subscribers (downlink) and from the subscribers to the central station (uplink). [A method that is based on such a device has been proposed by]

BACKGROUND INFORMATION

German Patent Application [19726120.5 [1],] No. 197 26 120 describes a device where the central station assumes the coordinating function for media access via a protocol-oriented transmission frame referred to there as signaling periods. This transmission frame contains, in addition to the useful signal data phases, signaling data phases for the uplink and the downlink.

The method [according to []described in German Patent Application No. 1[] has] 97 26 120 includes the [characteristic] step that the position of the downlink signaling is announced in the previous downlink signaling. This method presents the problem that a subscriber (terminal) that wishes to log into the communication process has no previous information regarding the position of the downlink signaling (Broadcast Channel, BCH). Therefore, this terminal must demodulate the transmission channel until it has found a BCH and has demodulated the information about the position of the next BCH. Access to the transmission channel can therefore only take place in the following transmission frame.

MARKED UP VERSION
OF SPECIFICATION

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The method described in German Patent Application No. 197 26 120 includes the step that the position of the downlink signaling is announced in the previous downlink signaling. This method presents the problem that a subscriber (terminal) that wishes to log into the communication process has no previous information regarding the position of the downlink signaling (Broadcast Channel, BCH). Therefore, this terminal must demodulate the transmission channel until it has found a BCH and has demodulated the information about the position of the next BCH. Access to the transmission channel can therefore only take place in the following transmission frame.

SUMMARY

In accordance with an example embodiment of the present invention, faster access to the transmission channel is made possible. By dividing the downlink signaling data phase into